PHANTOM ELITE®

Dual-Band Antennas
821-896 MHz/1850-1990 MHz

Laird Connectivity's unique patented Phantom Elite® dual-band cellular antenna operates simultaneously on Cellular 821-896 MHz and PCE 1850-1990 MHz and is a tough antenna for outdoor or indoor applications. The revolutionary design measures only 2.7 inches and features field diversity with both vertical and horizontal polarization. This gives the antenna diversity, frequency agility, low visibility, wide bandwidth, and a low angle radiation pattern that is superior to traditional gain antennas in most applications.

FEATURES AND BENEFITS

- True Field Diversity design ensures uninterrupted transmissions in urban canyons and rural drop-off areas
- Phantom® outperforms a 3-dB whip in many applications
- U.S. Patent Nos. 5,977,931 – 6,292,156 and 7,209,096

APPLICATIONS

- Public safety
- Transportation
- Utility
- Military mobile
- Fixed radio applications

ELECTRICAL SPECIFICATIONS		
Operating Frequency (MHz)	821-896	1850-1990
VSWR – Avg	< 2.1	
Frequency Bandwidth (low)	75 MHz @ VSWR < 2:1	
Frequency Bandwidth (high)	140 MHz @ VSWR < 2:1	
Return Loss (dB max)	-10	
Gain (dBi)	3.0	
Nominal Impedance (Ohms)	50	
Max Power - Ambient 25°C (W)	100	
Polarization	Vertical and Horizontal	
Pattern	Patented Field Diversity (Omni-directional)	
Half-Power Beamwidth (Elevation° x Azimuth°)	130 x 360	

MECHANICAL SPECIFICATIONS	
Radome Height – mm (in.)	68.58 (2.70)
Connector Weight – g (oz.)	NMO: 68.04 (0.15)
Cable and Mount	N-Female: 113.40 (0.25)
Terminations	MB195 (sold separately)
Radome Material	NMO or P Mount
Color	High Heat ABS
Half-Power Beamwidth (Elevation° x Azimuth°)	130 x 360

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature – °C (°F)	-40 to +85°C (-40 to +185°F)
Ingress Protection Rating	IP67
Material Substance Compliance	RoHS

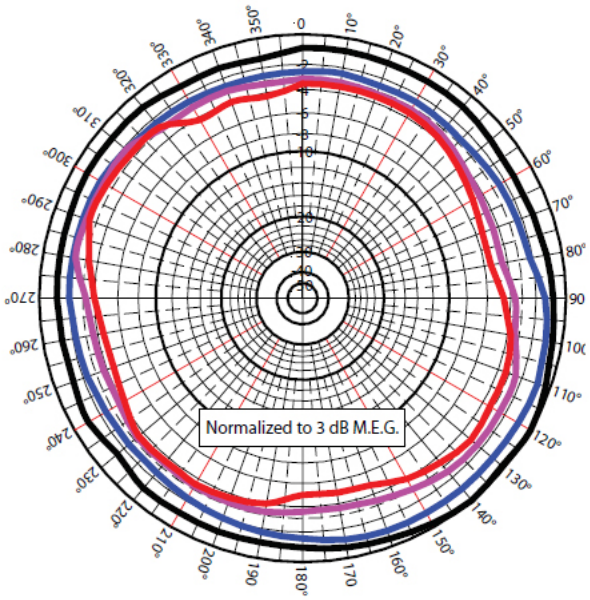
CONFIGURATION

PART NUMBER	COLOR	CONNECTOR
ETRAB821/18503	Black	NMO
ETRAB821/18503P	Black	N-Female
ETRA821/18503	White	NMO
ETRA821/18503P	White	N-Female

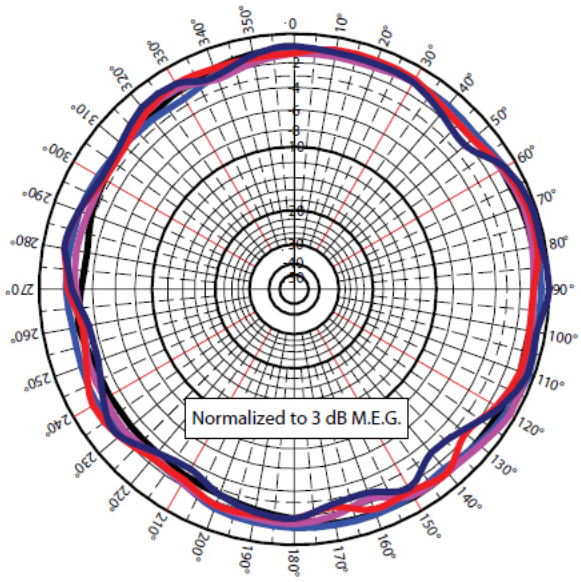
* P indicates Permanent Mount.

RADIATION PATTERNS

Vertical-to-Vertical Polarization
Azimuthal Pattern (Y, Z, or E-plane)



Cellular: 821-896 MHz



PCS: 1850-1990 MHz

TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

te.com

TE Connectivity, TE Connectivity (logo) and Every Connection Counts are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations TE will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the TE product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.

©2021 TE Connectivity. All Rights Reserved.

11/21 **Original**

Laird™
External Antennas is now part of
TE connectivity